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April 14, 1999

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

BY HAND DELIVERY

Magalie Salas, Esq.
Federal Communications Commission
445 12th Street, SW, Room TW-B204
Washington, DC 20554

Re: ET Docket No. 98-206

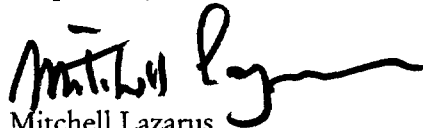
Dear Ms. Salas:

Enclosed for filing with the Commission are the original and four copies of the Reply Comments the Fixed Fixed Point-to-Point Communications Section Wireless Communications Division of the Telecommunications Industry Association in the above-referenced proceeding.

Please date stamp and return the enclosed extra copy of the Reply Comments.

If further information is necessary, please call me at the number above.

Respectfully submitted,



Mitchell Lazarus
Counsel for the Fixed Point-to-Point Communications Section
Wireless Communications Division of the
Telecommunications Industry Association

ML:deb

Enclosures

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Before the
Federal Communications Commission
Washington DC 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Amendment of Parts 2 and 25 of the)
Commission's Rules to Permit Operation)
of NGSO FSS Systems Co-Frequency with)
GSO and Terrestrial Systems in the Ku-Band)
Frequency Range)
and)
Amendment of the Commission's Rules to)
Authorize Subsidiary Terrestrial Use of the)
12.2-12.7 GHz Band by Direct Broadcast)
Satellite Licensees and Their Affiliates)

ET Docket No. 98-206
RM-9147
RM-9245

**REPLY COMMENTS OF THE
FIXED POINT-TO-POINT COMMUNICATIONS SECTION,
WIRELESS COMMUNICATIONS DIVISION OF THE
TELECOMMUNICATIONS INDUSTRY ASSOCIATION**

The Fixed Point-to-Point Communications Section, Wireless Communications Division of the Telecommunications Industry Association ("Fixed Section")¹ hereby submits the Reply Comments below in response to the Notice of Proposed Rulemaking (Notice) in the above-captioned proceeding.²

¹ The Telecommunications Industry Association is the principal industry association representing telecommunications equipment manufacturers, including manufacturers of terrestrial fixed point-to-point microwave radio service equipment. Fixed Section members serve, among others, companies — including telephone carriers, emerging communications carriers, PCS carriers, cellular carriers, public safety operations, utilities, railroads, and governments — which are licensed by the Commission to use private and common carrier bands for provision of important and essential telecommunications services. These Comments reflect only the views of the membership of the Fixed Section and do not necessarily reflect the views of any other members of the Association.

² NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems, ET Docket No. 98-206, Notice of Proposed Rulemaking, FCC 98-310 (released Nov. 24, 1998) (Notice).

The Fixed Section supports and endorses the Reply Comments filed today by the Fixed Wireless Communications Coalition (FWCC). The Fixed Section is filing separately to emphasize the following points.

This proceeding responds to SkyBridge's request for a modification of the Rules to fit its NGSO technology into a Ku band already congested with GSO and Fixed Service (FS) operations.³ SkyBridge has asked the Commission to rely on its repeated assertions of non-interference with FS operations.⁴ Now, however, with the Commission considering specific rules to implement its promises, SkyBridge is attempting to renege, and advocates rules that would

³ Petition for Rulemaking of SkyBridge L.L.C., in NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems, RM-9147 (filed July 3, 1997) (SkyBridge Petition). See also SkyBridge L.L.C., Application for Authority to Launch and Operate the SkyBridge Satellite System, File No. 48-SAT-P/LA-97 at 39 (filed Feb. 28, 1997); Amendment to SkyBridge L.L.C., Application for Authority to Launch and Operate the SkyBridge Satellite System, File No. 48-SAT-P/LA-97 (filed July 2, 1997) (SkyBridge Amendment).

⁴ "The SkyBridge System will cause no degradation in the quality of service of [satellite and terrestrial] systems or the availability of satellite and terrestrial communications links." Amendment to SkyBridge L.L.C., Application for Authority to Launch and Operate the SkyBridge Satellite System, File No. 48-SAT-P/LA-97 at 22 (filed July 2, 1997) (SkyBridge Amendment). "As a result of [its frequency usage plan] and the Gateway coordinations that SkyBridge will undertake, SkyBridge protects FS users from interference with no impact on the SkyBridge system." *Id.* at 10. "The SkyBridge System has been designed to operate co-frequency with GSO and terrestrial networks while protecting them from interference." *Id.* at 20. "The SkyBridge System will not interfere with, and is not requesting protection from interference caused by, any existing system, whether GSO, NGSO, or terrestrial, as such systems are currently operated. . . . Furthermore, the SkyBridge System will impose no operational constraints on satellite and terrestrial operators." *Id.* at 22. "(1) NGSO FSS systems operating in the subject bands will cause no noticeable degradation to the quality of service or availability of GSO and terrestrial links; and (2) NGSO FSS systems operating in the subject bands will impose no operational constraints on GSO and terrestrial operators." Petition for Rulemaking of SkyBridge L.L.C., in NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems, RM-9147 at 2 (filed July 3, 1997) (SkyBridge Petition). See also *id.* at 17 (same). "There should be no significant reduction in the ability of existing FS operators to add new links to their systems." *Id.* at 12.

defeat equitable sharing with the FS. Some of the other Ku-band NGSO applicants take positions even more deleterious to the FS.

The Fixed Section asks the Commission to protect FS operations and allow for their growth and expansion. This request does no more than hold SkyBridge to its original commitments.

A. The Commission Should Not Give GSO FSS Earth Stations Access to the Full 10.7-11.7 GHz Band.

GSO FSS downlink operations in the 10.7-11.7 GHz band are presently limited to the 500 MHz at 10.95-11.20 and 11.45-11.70 GHz.⁵ Without any justification — without even a mention in text — the Notice proposes to open the full band to GSO FSS downlink operations.⁶

The proposal is ill-advised. Nothing in the record of this proceeding suggests a shortage of 10.7-11.7 GHz spectrum for GSO FSS downlinks. The record does, however, document a worsening shortage of spectrum for terrestrial operations, of which this band is a significant part.⁷ The Fixed Section has pointed out several recent Commission decisions that limit FS operators' access to spectrum for forced relocation and needed growth.⁸

⁵ 47 C.F.R. § 25.202(a)(1).

⁶ Notice, Appendix A, C.F.R. § 25.202(a)(1) (proposed).

⁷ See Comments of the FWCC at 3-4; Comments of the Fixed Point-to-Point Communications Section, Wireless Communications Division of the Telecommunications Industry Association at 3-4.

⁸ Comments of the Fixed Point-to-Point Communications Section, Wireless Communications Division of the Telecommunications Industry Association at 3. Instances include reallocation of 1850-1990 and 2110-2200 MHz from the FS to PCS and mobile satellite services, Redevelopment of the Spectrum to Encourage Innovation in New Telecommunications Technology, ET Docket No. 92-2, First Report and Order, 7 FCC Rcd 6886 (1992), Second Report and Order, 8 FCC Rcd 6495 (1993), Third Report and Order, 8 FCC Rcd 6589 (1993); the reduction of spectrum available to the FS in the 18 GHz band, Redesignation of the 17.7-19.7

Adoption of the Commission's proposal will make coordination of new Ku-band FS facilities all but impossible in many parts of the country. Comsearch believes the present allocation facilitates FS/FSS coordination by permitting FS facilities to concentrate in the frequencies unavailable for routine earth station operation.⁹ Opening the full 10.7-11.7 GHz band to GSO FSS downlink operations would foreclose this option, and hence would severely inhibit new FS installations. As it is, many FS providers have trouble fitting their traffic into the parts of the band available to them. Opening the entire band to FSS operations will create large geographic regions having no 11 GHz frequencies available at all for the FS.

The Fixed Section also opposes Comsearch's proposal that an individual earth station be permitted to license *either* the current earth station bands *or* the bands proposed to be added, but not both.¹⁰ Comsearch argues this would preserve the ability of FS operators to coordinate with at least some earth stations, through frequency separation.¹¹ The Fixed Section opposes this option because neighboring earth stations that chose different bands would, between them, foreclose FS operations in the area. In short, the Commission should leave the 11 GHz FSS allocation unchanged.

GHz Frequency Band, IB Docket No. 98-172, Notice of Proposed Rulemaking, FCC 98-235 (released Sept. 18, 1998); and the designation of the upper 6 GHz (6700-7075 MHz) for mobile satellite feeder links. Amendment of Parts 2, 25 and 97 of the Commission's Rules with Regard to Mobile Satellite Service Above 1 GHz, ET Docket 98-142, Notice of Proposed Rulemaking (released Aug. 4, 1998). The "shared" 3.7-4.2 GHz band is effectively unavailable to the FS due to the extremely difficult problems of coordinating new FS stations with existing licensed earth stations.

⁹ Comments of Comsearch at 6-7.

¹⁰ Comments of Comsearch at 7.

¹¹ Comments of Comsearch at 7-8.

B. The Commission Should Impose Conditions to Facilitate Sharing Between the Fixed Service and NGSO FSS Gateway Earth Stations.

For the reasons spelled out in the FWCC Reply Comments, rules proposed by some NGSO interests would improperly hinder FS operation and expansion. The NGSO parties argue that these measures are expensive, unnecessary, or both. But NGSO providers enter the band under an obligation to allow for continued operation and reasonable expansion by the incumbent services, and cannot now be heard to object to the cost of coexistence. Moreover, these measures are necessary to prevent NGSO gateway earth stations from "sterilizing" large geographical areas against FS operations. Notwithstanding NGSO objections, the Commission should—

- reaffirm the decision not to authorize NGSO gateways at 17.7-17.8 GHz;
- implement the proposal for exclusion zones around the 50 largest population centers, and expand it to include corridors 50 km to either side of intercity routes;
- limit numbers of gateway sites to 40 for all NGSO providers;
- set a minimum antenna size of 4.5 meters;
- require 18 dB of "virtual shielding" around gateways that FS operators can take into account in coordination, but that FSS operators need not build unless actually required;
- adopt coordination procedures appropriate to NGSO operations; and
- continue to prohibit service links in shared bands allocated for gateway operations.

CONCLUSION


The Commission should implement the promises SkyBridge made at the outset of this proceeding: to operate without interference to the FS, and without hindering FS expansion. It should do so by adopting the foregoing measures, as explained in greater detail in the FWCC Reply Comments.

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Respectfully submitted,

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April 14, 1999

CERTIFICATE OF SERVICE

I, Deborah N. Lunt, a secretary for the law firm of Fletcher, Heald & Hildreth, P.L.C., hereby certify that a true copy of the foregoing "Reply Comments of the Fixed Point-to-point Communications Section, Wireless Communications Division of the Telecommunications Industry Association" was sent this 14th day of April, 1999, via Hand-Delivery to the following:

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